

reduce or eliminate color breakup in still images caused by high speed eye movement. By performing color sequence driving with a frame frequency of 250Hz or more, not only is the perceived color breakup due to the movement of the presenter prevented, but also an observer's perceived color breakup caused by high speed eye movement is reduced or eliminated. Please see at least page 13, lines 1-11 of the specification.

High Speed Eye Movement

There are four kinds of eye movement: (1) a following movement; (2) an intermittent movement; (3) a convergent/divergent movement; and (4) an involuntary eye movement. For example, the intermittent movement is an intermittent high speed jump movement and is an eye movement to compensate a shifting rate of the subject beyond the rate of the following movement, that can be seen for example, in the line of sight shifting at a time when reading a book, and is a high-speed movement with 300 deg/sec or more. Please see at least the disclosure on page 17, lines 18-25 of the specification.

Still Image

As discussed above, high speed eye movement can be seen in the line of sight shifting at a time when reading a book, as discussed on page 17, line 24 of the specification. A book is naturally a still image. Accordingly, high speed eye movement can be seen in still images and thus, is supported by the specification. As such, "color breakup in still images caused by high speed eye movement" is also supported by the specification.

The Claimed Features are Supported by the Specification

In addition to the above discussed arguments with respect to the claimed features, for at least the following reasons the features of the claims are supported by the specification.

The specification clearly discusses displayed images on a screen. The display devices inherently project, as is well known to one of ordinary skill in the art, at least one of a still image and a moving image. For example, page 4, lines 20-23 discusses the actions of a

presenter who performs a presentation standing in front of a screen. Clearly, presentations displayed on a screen can be presentations of still images such as graphical displays and/or textual displays which can be still images. Further, the specification discusses on page 7, lines 1-5 a person who watches a displayed image on a screen. Accordingly, the specification clearly teaches and discloses the subject matter regarding still images, as recited in the claims.

For at least the reasons discussed above, Applicants respectfully requested withdrawal of the rejection of claims 1, 3, 5-11 and 13-18 under 35 U.S.C. §112, first paragraph.

II. The Claims Define Patentable Subject Matter

The Office Action rejects claims 1, 3-11 and 13-14 under 35 U.S.C. §102(b) as anticipated by U.S. Patent No. 5,959,598 to McKnight. This rejection is respectfully traversed.

Applicants respectfully submit that McKnight does not teach, disclose or suggest a colored light generation unit that generates a plurality of colored lights at a predetermined frequency being equal to or greater than 250 Hz so as to reduce or eliminate color breakup in still images caused by high speed eye movement, as claimed in claim 1 and similarly claimed in claims 11 and 14.

The Examiner does not direct Applicants attention to any particular disclosure in McKnight for reducing or eliminating color breakup in still images caused by high speed eye movement. That is, McKnight solves color breakup by the moving images (column 18, lines 52-65) and does not teach, disclose or even suggest the problem of color breakup by a saccade eye movement that the present invention addresses. The problem of color breakup is caused by high speed eye movement (saccade eye movement) in still images. The present invention can address the problem in still images. This is because, in exemplary

embodiments of the present invention, color repetition frequency is 250 Hz or more to solve color breakup in still images caused by high speed eye movement.

However, McKnight cannot solve the problem in still image. Because McKnight only discloses increasing the subframe rate to solve color breakup by the moving images, McKnight can not have the necessity of increasing the subframe rate in still image. Making the frequency high requires a more complicated drive circuit. Thus, a person skilled in the art would not try to make high frequency without a purpose.

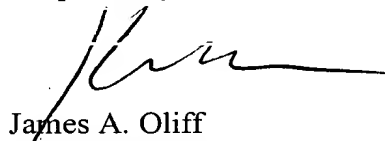
McKnight discloses increasing the subframe rate to solve color breakup by the moving images. Further, McKnight discloses 6 analog subframes, 9, 12, etc... (the color repetition frequency, 120 Hz, 180 Hz, 240 Hz, etc...). McKnight only discloses the color repetition frequency is higher than ordinary display rate (frame frequency of 60 Hz). In other words, McKnight merely teaches or suggests the threshold value of the color repetition frequency is 60 Hz to solve color breakup by the moving images. Exemplary embodiments of the present invention disclose color breakup by the movement of the presenter can be reduced or eliminated in the color repetition frequency of 180-250 Hz. Further, exemplary embodiments disclose color breakup by high speed eye movement (in addition to color breakup by the movement of the presenter) can be reduced or eliminated in the color repetition frequency of 250 Hz or more (page 13, lines 1-9 and page 17, line 11 - page 18, line 4). In other words, the threshold value of the color repetition frequency is 250 Hz to solve color breakup by a high speed eye movement. Accordingly, McKnight does not disclose the threshold value of the color repetition frequency is 250 Hz. Withdrawal of the rejection of claims 1, 3-11 and 13-14 under 35 U.S.C. §102(b) is respectfully requested.

III. Conclusion

In view of foregoing remarks, Applicants respectfully submit that claims 1, 3, 5-11, and 13-18 define patentable subject matter and the application is in condition for allowance. Favorable reconsideration is respectfully solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,



James A. Oliff
Registration No. 27,075

Kevin M. McKinley
Registration No. 43,794

JAO:KMM/jfb

Date: March 8, 2005

OLIFF & BERRIDGE, PLC
P.O. Box 19928
Alexandria, Virginia 22320
Telephone: (703) 836-6400

<p>DEPOSIT ACCOUNT USE AUTHORIZATION Please grant any extension necessary for entry; Charge any fee due to our Deposit Account No. 15-0461</p>
--